SALTVILLE WASTE DISPOSAL PONDS ADMINISTRATIVE RECORD FILE * INDEX OF DOCUMENTS

I. SITE IDENTIFICATION

- 1. Report: <u>Ecology and Analysis of Trace Contaminants</u>, prepared by Oak Ridge National Laboratory, 2/76. P. 100001-100025.
- 2. Report: <u>Preliminary Project Scope, Saltville Sludge</u>
 <u>Stabilization Site Test</u>, prepared by Olin Corporation,
 1980. P. 100026-100101.
- 3. Letter to Mr. R.V. Davis, Virginia State Water Control Board, from Mr. Frederick C. Boucher, Commonwealth of Virginia Senate, re: Mercury pollution of the North Fork of the Holston River, 4/15/80. P. 100102-100103.
- 4. Letter to Mr. Larry K. Owens, Virginia State Water Control Board, from J.C. Brown, Olin Corporation, re: Transmittal of a project scope for the planned field work on pond 5, 1/20/81. P. 100104-100107. The preliminary project scope is attached.
- 5. Letter to Mr. John R. Butcher, Office of the Attorney General, from Dr. K.J. O'Leary, Olin Corporation, re: An agreement to proceed in studying in-situ stabilization of mercury in Pond 5, 4/3/81. P. 100108-100110.
- 6. Memorandum to Mr. K.D. Roberts, Olin Corporation, from Mr. D.W. Cawlfield, Olin Corporation, re: February 1981 Monthly Progress Report, 4/8/81. P. 100111-100114.
- 7. Letter to Dr. Kevin J. O'Leary, Olin Corporation, from Mr. R.V. Davis, Virginia State Water Control Board, re: Procession of the study of in-situ stabilization of Pond 5 and responses to a letter regarding site sampling work, 4/16/81. P. 100115-100117.
- 8. Letter to Mr. Robert V. Davis, Virginia State Water Control Board, from Dr. K.J. O'Leary, Olin Corporation, re: An agreement regarding Olin's work to minimize discharges from Pond 5, 5/26/81. P. 100118-100119.
- * Administrative Record File available 8/28/87, updated 9/11/90, 12/21/92, and 10/27/97.

- 9. Letter to Mr. John Butcher, Office of the Attorney General, from Mr. Joseph J. Armao, U.S. EPA, re: Review of the redraft of the Saltville Special Order submitted by Olin, 7/2/81. P. 100120-100122.
- 10. Letter to Mr. Larry K. Owens, Virginia State Water Control Board, from Mr. James C. Brown, Olin Corporation, re: Efforts to determine the cause of continued high mercury concentrations in fish, 7/30/81. P. 100123-100141. The following are attached:
 - a) Table I, Biomonitoring Collections, North Fork Holston River;
 - b) Figure I, Mean Mercury Concentration of Fish Collected at Stations Below the Olin Plant Vicinity on the North Fork of the Holston River, 1970-1981;
 - c) Figure 2, Summary of the Mercury Content of Fish Collected Below the Olin Plant Vicinity on the North Fork of the Holston River, 1970-1981;
 - d) Table 2, Mean Mercury Concentration in Fish by Sample Site and Species Group;
 - e) Table 3, Curve Fit Analysis for Fish Mercury Versus River Mile;
 - f) Figure 3, Total Mercury in Algae in N.F. Holston River, September 25, 1980;
 - g) Figure 4, Total Mercury in Algae in N.F. Holston River, November 5, 1980;
 - h) Figure 5, Total Mercury in Algae in N.F. Holston River, December 3, 1980;
 - i) Figure 6, Total Mercury in Macroinvertebrates N.F. Holston River, November 5, 1980;
 - j) Figure 7, Total Mercury in Macroinvertebrates in N.F. Holston River, December 3, 1980;
 - k) Figure 8, Total Mercury in Macroinvertebrates
 in N.F. Holston River, May 5, 1981;
 - 1) Figure 9, Total Mercury in Macroinvertebrates

- in N.F. Holston River, June 25, 1981;
- m) Table 4, Distribution of Macroinvertebrates
 Downstream of Pond 6;
- n) Table 5, Benthic Diversity, North Fork Holston River, August 25, 1980.
- 11. Letter to Mr. James C. Brown, Olin Corporation, from Mr. R.V. Davis, Virginia State Water Control Board, re: Results of biomonitoring work, 9/9/81. P. 100142-100146.
- 12. Letter to Mr. R.V. Davis, Virginia State Water Control Board, from Dr. Kevin J. O'Leary, Olin Corporation, re: Technical issues concerning in-situ stabilization, capping, and upland diversion at Pond 5, 9/14/81. P. 100147-100148.
- 13. Letter to Mr. John R. Butcher, Office of the Attorney General, from Mr. J.C. Brown, Olin Corporation, re:
 Two reports entitled "In-Situ Stabilization of Mercury in Saltville Pond Sludge" and "Waste Pond No. 5, Cap Feasibility Study and Stormwater Diversion Design," 9/16/81. P. 100149-100154. A letter dated September 10, 1981 regarding technical issues concerning in-situ stabilization, capping, and upland diversion at Pond 5 is attached.
- 14. Letter to Mr. Larry K. Owens, Virginia State Water Control Board, from Mr. Earl C. Leming, Tennessee Department of Public Health, re: Comments and suggestions concerning Task Force activities and Feasibility Studies, 10/2/81. P. 100155-100159. Data on Mercury levels in fish for 1980 is attached.
- 15. Letter to Dr. Kevin O'Leary, Olin Corporation, from Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, re: Questions to be addressed regarding in-situ chemical stabilization, 12/2/81. P. 100160-100161.
- 16. Letter to Dr. Kevin J. O'Leary, Olin, from Mr. David S. Bailey, Virginia State Water Control Board, re: Response to a letter regarding Western upland diversion, 12/18/81. P. 100162-100162.

- 17. Letter to Mr. David S. Bailey, Virginia State Water Control Board, from Dr. K.J. O'Leary, Olin, re: Implementation of the western upland diversion ditch and implementation of in-situ treatment, 12/9/81. P. 100163-100168. A Graph of Effect of Western Diversion Ditch on Water Level, a Project Schedule for Pond 5 Diversion Structure, and a Sludge Stabilization Project Schedule are attached.
- 18. Routing and transmittal slip to Mr. Joe Armao, U.S. EPA, from Gene, re: Transmittal of Olin/Saltville correspondence, 12/29/81. P. 100169-100170.
- 19. Letter to Dr. Kevin O'Leary, Olin Corporation, from Mr. R.V. Davis, Virginia State Water Control Board, re: Commitment and schedules for the implementation of mercury abatement projects, 12/21/81. P. 100171-100171.
- 20. Letter to Mr. Yener A. Soylemez, U.S. EPA, from Mr. I.H. Suffet, Drexel University, re: Transmittal of a review of an article from Environmental Science and Technology, 12/22/81. P. 100172-100176. The article is attached.
- 21. Letter to Mr. R.V. Davis, Virginia State Water Control Board, from Dr. K.J. O'Leary, Olin Corporation, re: Clarification of Olin's commitment to install in-situ chemical stabilization at Pond No. 5, 2/19/82. P. 100177-100178.
- 22. Report: Mercury in the Fish and Sediment of the North Fork Holston River, prepared by Virginia State Water Control Board, 3/82. P. 100179-100204.
- 23. Letter to Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Transmittal of Olin's response to questions and a summary of mercury concentration data, 4/1/82. P. 100205-100237. The following are attached:
 - a) a Response to Task Force Questions Regarding In-Situ Chemical Stabilization;
 - b) in-situ stabilization data sampling results;
 - c) a memorandum regarding the February 1981 Monthly Progress Report, dated April 8, 1981;

- d) a memorandum regarding the preliminary Report on Sludge Stabilization Chemistry, dated December 4, 1981;
- e) Table I, Concentrations of Metals Found in the Aqueous Phase of Saltville Pond No. 5;
- f) Table II, Concentrations of Anions Found in the Aqueous Phase of Saltville Pond No. 5;
- g) Table III, Effects of Retreatment on Mercury Concentrations;
- 24. Information packet, Saltville mercury, 4/6/82. P. 100238-100242.
- 25. Letter to Dr. Kevin J. O'Leary, Olin Corporation, from Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, re: Confirmation of discussions from an April 6 and 7, 1982 Task Force meeting, 4/82.
 P. 100243-100247. A letter dated April 22, 1982 regarding the meeting's resolutions is attached.
- 26. Report: Appendix A, Engineering Specifications for Olin Chemicals, Waste Pond No. 5 Stormwater Diversion System, Saltville, Smyth County, Virginia, prepared by Wehran Engineering, 5/82. P. 100248-100292.
- 27. Letter to Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Results of in-situ monitoring of Pond 5, 5/6/82. P. 100293-100402. The following are attached:
 - a) Attachment A, Mercury Concentration Data from Test Sites 2A, 2B, and 2C;
 - b) Attachment B, Tensiometer and Well Elevation Data from Test Sites 2A, 2B, and 2C;
 - c) Attachment C, Thiosulfate Concentration Data from Test Sites 2A, 2B, and 2C;
 - d) Attachment D, Daily Weather Data;

- e) Attachment E, Plot of Former Chlorine Plant Site Showing Well Locations;
- f) Attachment F, Permeability Data from Former Chlorine Plant Site;
- g) Attachment G, Mercury Concentration Data in Groundwater at Former Chlorine Plant Site;
- h) Attachment H, Water Elevations in Wells at Former Chlorine Plant Site;
- i) Attachment I, Copies of the Two References Requested by EPA.
- 28. Letter to Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Mercury concentration analysis, 5/17/82. P. 100403-100432. The following are attached:
 - a) 19 diagrams of the North Fork Holston River showing River Water Analysis for Total Mercury (ppt), from June 21, 1981 to April 27, 1982;
 - b) Attachment A, Mercury Loading in North Fork Holston River for Month of April, 1982, Based on Gold Film Water Analysis;
 - c) Attachment B, Water Sampling for Gold Film Water Analysis;
 - d) Attachment C, Gold Film Mercury Analysis;
 - e) Figure 1, Flow system and tubing schematic for Hg analysis of liquids using the model 301;
 - f) a Principal of Operation summary.
- 29. Letter to Dr. Kevin J. O'Leary, Olin Corporation, from Mr. Bob McEachern, Virginia State Water Control Board, re: Confirmation of task force resolutions concerning upland diversion, in-situ chemical abatement, and mercury pollution, 5/27/82. P. 100433-100434. A routing and transmittal slip is attached.
- 30. Letter to Mr. Mike Vaccaro, U.S. EPA, from Mr. Robert M. McEachern, Virginia State Water Control Board, re:

Development of a monitoring program to follow the completion of the western diversion ditch and the inriver mercury abatement project, 6/14/82. P. 100435-100436. A Proposed Monitoring Program Relating to Mercury Abatement is attached.

- 31. Letter to Mr. Yener Soylemez, U.S. EPA, from Mr. I.H. Suffet, Drexel University, re: Evaluation of the Monitoring Program, 6/17/82. P. 100437-100439. The review is attached.
- 32. Letter to Mr. Yener Soylemez, U.S. EPA, from Mr. I.H. Suffet, Drexel University, re: Saltville site visit memorandum, 6/17/82. P. 100440-100441. The site visit memorandum dated June 15, 1982 is attached.
- 33. Letter to Mr. Michael F. Vaccaro, U.S. EPA, from Mr. J.C. Brown, Olin Corporation, re: EP toxicity sampling and testing results, 6/25/82. P. 100442-100452. A sampling results summary report is attached.
- 34. Letter to Mr. J.C. Brown, Olin Corporation, from Mr. Joseph J. Armao, U.S. EPA, re: Sediments results of EP toxicity tests, 7/6/82. P. 100453-100453.
- 35. Memorandum to Mr. V.A. Carpano from Mr. H.M. Gildea, Virginia State Water Control Board, re: Stormwater diversion system for Pond 5, 7/19/82. P. 100454-100454.
- 36. Report: <u>Update Review: Proposed Monitoring Program Relating to Mercury Abatement at Olin Site at Saltville, VA</u>, prepared by Dr. I.H. Suffet, 7/29/82. P. 100455-100457.
- 37. Response Summary for Saltville Waste Disposal Ponds, 8/82. P. 100458-100459. The site plan is attached.
- 38. Note for the Record, re: A Special Order issued to Olin Corporation, prepared by Dr. I.H. Suffet, 9/7/82. P. 100460-100460.
- 39. Report: <u>Geohydrologic Study</u>, <u>Former Chlor-Alkali Plant Site</u>, <u>Saltville</u>, <u>Virginia</u>, prepared by Olin Corporation, 9/82. P. 100461-100503. A transmittal letter is attached.

- 40. Memorandum to Mr. Yener A. Soylemez, U.S. EPA, from Mr. Benjamin A. Lacy, U.S. EPA, re: Peer Review of the Olin-Saltville Geohydrologic Study, 10/14/82. P. 100504-100506. Two Peer Reviews of OSWER Information Material forms are attached.
- 41. Memorandum to the Honorable Betty J. Diener from Mr. R.V. Davis, Virginia State Water Control Board, re: Actions to be taken by the Olin task force concerning mercury pollution abatement, 10/22/82. P. 100507-100511.
- 42. Letter to Dr. Kevin J. O'Leary, Olin Corporation, from Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, re: Consent Special Order for river and diversion projects, 11/10/82. P. 100512-100519. The Special Order is attached.
- 43. Letter to Mr. Martin Ferguson, Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Atmospheric mercury at Saltville, 1/17/83. P. 100520-100533. The following are attached:
 - a) a memorandum regarding a meeting to discuss the muck pond, dated october 8, 1976;
 - b) a list of people to attend the meeting;
 - c) Summary of Meeting on Olin Muck Ponds;
 - d) a memorandum regarding residual environmental problems, dated November 17, 1976;
 - e) a report entitled "Ambient Mercury Sampling Results."
- 44. Letter to interested citizen from Mr. R.V. Davis, Virginia State Water Control Board, re: Mercury water quality standard and policy for freshwater systems, 1/20/83. P. 100534-100540. A memorandum dated January 20, 1983 regarding proposed water quality standard and policy for mercury is attached.
- 45. Memorandum to Mr. Yener A. Soylemez, U.S. EPA, from Mr. Charles Jones, Jr., U.S. EPA, re: Quality assurance of water, sediment, and fish tissue sampling results, 2/4/83. P. 100541-100544. A letter dated January 24,

- 1983 regarding split samples and a draft Quality Assurance Program Summary are attached.
- 46. Report: <u>Suggestions for Evaluation of Hg Reduction</u>
 <u>Monitoring Program</u>, (no author cited), 2/10/83.
 P. 100545-100562.
- 47. Note to the Record from Dr. I.H. Suffet, Drexel University, re: Meeting with Olin Corporation, 2/11/83. P. 100563-100564. A note to the record dated September 7, 1982 regarding the Special Order is attached.
- 48. Handwritten summary by Mr. Yener A. Soylemez, U.S. EPA, re: Saltville Waste Disposal Ponds, 3/9/83. P. 100565-100566.
- 49. Initial Evaluation of Baseline Data to Determine the Effect of the Diversion Around Muck Pond No. 5, prepared by Dr. I.H. Suffet, Drexel University, 3/11/83. P. 100567-100570. A revised version of the evaluation is attached.
- 50. Letter to Mr. Yener Soylemez, U.S. EPA, from Mr. Vincent A. Carpano, Virginia State Water Control Board, re: Statistical procedures performed on baseline data, 3/18/83. P. 100571-100572.
- 51. Letter to Mr. Martin Ferguson, Jr., Virginia State Water Control Board, from Mr. Yener A. Soylemez, U.S. EPA, re: Transmittal of initial comments on Olin's submission, 3/23/83. P. 100573-100574. The Initial Evaluation of Baseline Data to Determine the Effect of the Diversion Around Muck Pond #5 is attached.
- 52. Letter to Mr. Yener Soylemez, U.S. EPA, from Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, re: Baseline data concerns, 4/1/83. P. 100575-100575.
- 53. Letter to Mr. J.C. Brown, Olin Corporation, from Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, re: Baseline data for fish sampling, 4/1/83. P. 100576-100577.
- 54. Executive Order Number Thirty-five from the Commonwealth of Virginia, Office of the Governor, re: Assigning Responsibility to State Officials and State Agencies for Participation in the "Superfund" Program, 4/5/83. P. 100578-100579.

- 55. Letter Report, Air Monitoring Technology for Mercury, from Ms. Linda Y. Boornazian, U.S. EPA, 4/26/83.
 P. 100580-100590. Two articles entitled "Improved hopcalite procedure for the determination of mercury vapor in air by flameless atomic absorption" and "Personal Monitoring Technique for Mercury Vapor in Air and Determination by Flameless Atomic Absorption" are attached.
- 56. Routing and transmittal slip to Mr. Mike Vaccaro, U.S. EPA, from Mr. Martin Ferguson, Virginia State Water Control Board, re: Slides shown at the task force meeting, 4/27/83. P. 100591-100591.
- 57. Handwritten memorandum to Mr. Peter W. Schaul, U.S. EPA, from Mr. Yener A. Soylemez, U.S. EPA. re: Review of a document concerning site activities, 5/83. P. 100592-100595. An NPL site description summary is attached.
- 58. Handwritten memorandum to Ms. Linda Y. Boornazian, U.S. EPA, from Mr. Yener A. Soylemez, U.S. EPA, re: Air monitoring for mercury, 5/2/83. P. 100596-100596.
- 59. Letter to Mr. J.C. Brown, Olin, from Mr. Richard N. Burton, Virginia State Water Control Board, re: Schedule for completion of the diversion project, 5/20/83. P. 100597-100597.
- 60. Memorandum to Mr. Yener Soylemez, U.S. EPA, from Vernard H. Webb, U.S. EPA, re: Initialization of a request for technical support, 5/26/83. P. 100598-100599. A Technical Support Notice is attached.
- 61. Handwritten memorandum to Ms. Linda Y. Boornazian, U.S. EPA, from Mr. Yener A. Soylemez, U.S. EPA, re: Sampling of mercury in the air, 5/31/83. P. 100600-100600.
- 62. Handwritten memorandum to Mr. Peter W. Schaul, U.S. EPA, from Mr. Yener A. Soylemez, U.S. EPA, re: Summary of a site visit, 5/31/83. P. 100601-100602.
- 63. Peer review of OSWER information materials, 6/7/83.
 P. 100603-100613. A report entitled "Preliminary Draft Documentation, Statistical Evaluation of Pond #5

- Outfall Data" is attached.
- 64. Report: Statistical Evaluation of Muck Pond #5 Outfall Data, prepared by Dr. J. Oler and Dr. I.H. Suffet, Drexel University, 6/14/83. P. 100614-100623.
- 65. Memorandum to Mr. Yener Soylemez, U.S. EPA, from Mr. Stuart Kerzner, U.S. EPA, re: Hydrogeological review, 6/23/83. P. 100624-100624.
- 66. Letter to Mr. Martin G. Ferguson, Virginia State Water Control Board, from Mr. Michael F. Vaccaro, U.S. EPA, re: Comments on the mercury baseline for Pond 5 and other Superfund activities that affect the site, 6/27/83. P. 100625-100626.
- 67. Letter to Mr. Martin Ferguson, Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Amended plan for processed river sediments, 7/15/83. P. 100627-100629.
- 68. Telephone conversation record of Mr. Eric Johnson, U.S. EPA, with Mr. Martin Ferguson, Virginia State Water Control Board, re: Amended plan for processed river sediments, 7/28/83. P. 100630-100631.
- 69. Letter to Mr. James C. Brown, Olin Corporation, from Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, re: Amended plan for processed river sediment, 7/29/83. P. 100632-100632.
- 70. Letter to Mr. Martin Ferguson, Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Comments on planned disposal of sediment, 8/1/83. P. 100633-100635.
- 71. Letter to Mr. Martin Ferguson, Virginia State Water Control Board, from Mr. Eric W. Johnson, U.S. EPA, re: Encapsulation and burial of mercury contaminated sediments, 8/3/83. P. 100636-100637.
- 72. Routing and transmittal slip to Mike from Eric, re: Talks with Olin, 8/5/83. P. 100638-100638.
- 73. Memorandum to Mr. Peter Schaul, U.S. EPA, from Mr. Alan J. Cimorelli, U.S. EPA, re: Evaluation of the impact of Mercury vapor emissions on ambient air, 8/5/83. P. 100639-100639.

- 74. Memorandum to Mr. Thomas P. Eichler, U.S. EPA, from Mr. Stephen R. Wassersug, U.S. EPA, re: Background and site work information, 8/16/83. P. 100640-100641.
- 75. Letter to Mr. Eric Johnson, U.S. EPA, from Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, re: Comments on the draft Remedial Action Master Plan (RAMP), 9/12/83. P. 100642-100643.
- 76. Letter to Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, from Mr. Eric W. Johnson, U.S. EPA, re: Comments on the Remedial Action Master Plan, 10/19/83. P. 100644-100645.
- 77. Letter to Mr. Eric Johnson, U.S. EPA, from Mr. Michael A. Bellanca, Virginia State Water Control Board, re: Clarification of information to be used in preparing the Remedial Action Master Plan, 10/28/83. P. 100646-100647.
- 78. Memorandum to Mr. H. Ronald Preston, U.S. EPA, from Mr. Eric W. Johnson, U.S. EPA, re: Dredging and mercury discharge activities, 12/1/83. P. 100648-100648.
- 79. Report: <u>Saltville Project Data Report, 1983 Fish and Sediment Sampling Results</u>, prepared by Olin Corporation, 3/84. P. 100649-100687.
- 80. Letter to Mr. Robert E. Landreth, Municipal Environmental Research Laboratory, from Dr. Walter F. Lee, U.S. EPA, re: Mercury stabilization, (undated). P. 100688-100689. A list of Topics to be Evaluated is attached.
- 81. Report: <u>Section 2, Site A, Olin Corporation,</u>
 <u>Saltville, Virginia</u>, (undated). P. 100690-100715.
- 82. Report: <u>Description of Work River Bottom Excavation</u>, <u>Saltville</u>, <u>Virginia</u>, (no author cited), (undated). P. 100716-100787.

II. REMEDIAL ENFORCEMENT PLANNING

- Memorandum to file from Mr. Yener Soylemez, U.S. EPA, re: the present status of the executive summary, 12/31/81. P. 200001-200003.
- 2. Special Order Issued to Olin Corporation by Virginia State Water Control Board, 8/82. P. 200004-200010. Appendix A, Mercury Abatement, and Attachment A, Monitoring Program Relating to Mercury Abatement, are attached.
- 3. Letter to Dr. Kevin J. O'Leary, Olin Corporation, from Mr. R.V. Davis, Virginia State Water Control Board, re: A presentation made at September 26 through 28, 1982 board meeting concerning the Consent Special Order, 10/5/82. P. 200011-200012. An Excerpt From the Proceedings of the Board at Its Meeting on September 26-28, 1982 is attached.
- 4. Letter to Dr. Kevin J. O'Leary, Olin Corporation, from Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, re: The signed and executed Consent Special Order for river and diversion projects, 11/10/82. P. 200013-200013.
- 5. Comments of Environmental Defense Fund on "A Special Order Issued to Olin Corporation," prepared by Virginia State Water Control Board, 11/11/82. P. 200014-200030. The following are attached:
 - a) a memorandum regarding mercury pollution abatement, dated October 22, 1982;
 - b) a letter regarding modifications to the Consent Special Order, dated September 29, 1983;
 - c) a memorandum regarding a Consent Order amendment, dated August 29, 1983;
 - d) a letter regarding approval of the Release Agreement, dated August 1, 1984;
 - e) a Release Agreement;
 - f) an information sheet regarding site status;
- 6. Consent Decree, United States of America versus Olin

Corporation, Civil Action No. 88-0163-A, 9/15/88. P. 200031-200082. A transmittal memorandum is attached.

III. REMEDIAL RESPONSE PLANNING

- 1. Report: 1984 Supplement to Geohydrologic Study, Former Chlor-Alkali Plant Site, Saltville, Virginia, September 1982, 1984. P. 300001-300016.
- 2. Letter to Mr. Michael A. Bellanca, Virginia State Water Control Board, from Mr. Thomas C. Voltaggio, U.S. EPA, re: Preparation of the revised draft Remedial Action Master Plan, 1/4/84. P. 300017-300018.
- 3. Letter to Mr. Thomas C. Voltaggio, U.S. EPA, from Mr. Michael A. Bellanca, Virginia State Water Control Board, re: Preliminary comments on the draft Remedial Action Master Plan, 2/6/84. P. 300019-300019.
- 4. Action Memorandum to Mr. Thomas P. Eichler, U.S. EPA, from Mr. Stephen R. Wassersug, U.S. EPA, re: Authorization to proceed with a Remedial Investigation/Feasibility Study (RI/FS), 3/2/84. P. 300020-300023.
- 5. Action Memorandum to Mr. Thomas P. Eichler, U.S. EPA, from Mr. Stephen R. Wassersug, U.S. EPA, re:
 Authorization of an RI/FS, 3/2/84. P. 300024-300025.
- 6. Memorandum to Mr. David Noble, U.S. EPA, from Ms. Stephany Del Re', U.S. EPA, re: The proposed Scope of Work, 3/14/84. P. 300026-300030.
- 7. Memorandum to file from Mr. Thomas C. Voltaggio, U.S. EPA, re: Telephone conversation with Mr. Bill Gilley concerning support for the RI/FS, 4/10/84. P. 300031-300031.
- 8. Memorandum to file from Ms. Stephany Del Re', U.S. EPA, re: An April 11, 1984 meeting to discuss future site actions, 4/12/84. P. 300032-300033. A handwritten meeting sign-in sheet is attached.
- 9. Letter to Mr. William F. Gilley, Virginia Division of Solid Waste and Hazardous Management, from Mr. Thomas C. Voltaggio, U.S. EPA, re: EPA's future plans for the site, 7/9/84. P. 300034-300034.
- 10. Report: <u>Supplement to Geohydrological Study, Former Chlorine Plant Site, Saltville, Virginia</u>, prepared by Olin Corporation, 7/20/84. P. 300035-300051. A transmittal letter is attached.

- 11. Letter to Mr. Thomas C. Voltaggio, U.S. EPA, from Mr. Verrill M. Norwood, Olin Corporation, re: Comments on the Remedial Action Master Plan, 7/25/84. P. 300052-300056.
- 12. Letter to Mr. Harold Byer, U.S. EPA, from Dr. Kenneth G. Symms, Mr. William Wentworh, and Mr. Garth Glenn, NUS Corporation, re: Peer review comments, 9/14/84. P. 300057-300078. The following are attached:
 - a) memorandum regarding a request for assistance from the Federal Investigations Team (FIT) Office, dated May 25, 1984;
 - b) a Peer Review of OSWER Information Materials form;
 - c) a summary of mercury;
 - d) a report entitled "Water-Related Environmental Fate of 129 Priority Pollutants;"
 - e) a Site Specific Guidance Document coversheet for "Methods for Chemical Analysis of Water and Wastes;"
 - f) an description sheet entitled "Industrial Hygiene Instruments Model MV-2 Mercury Vapor Sniffer;"
 - g) a Peer Review of OSWER Information Materials form.
- 13. Report: A Toxicological Impact Review for Olin Saltville, prepared by NUS Corporation, 9/14/84. P. 300079-300143.
- 14. Letter to Mr. Martin Ferguson, Virginia State Water Control Board, from Mr. Bevan W. Brown, Tennessee Valley Authority, re: Concerns that the Risk Assessment and Feasibility Study may duplicate assessments already performed, 9/27/84. P. 300144-300144.
- 15. Letter to Mr. Thomas C. Voltaggio, U.S. EPA, from Mr. Michael A. Bellanca, Virginia State Water Control Board, re: Comments on the draft Work Plan and EPA's approach tot the site as discussed in a September 10,

- 1984 meeting, 10/1/84. P. 300145-300147. A meeting sign-in sheet is attached.
- 16. Letter to Mr. Michael A. Bellanca, Virginia State Water Control Board, from Mr. Thomas C. Voltaggio, U.S. EPA, re: EPA's comments on the draft Feasibility Study Work Plan, 10/25/84. P. 300148-300149.
- 17. Letter to Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: The semi-annual report of monitoring data from Pond 5 outfall, 3/1/85. P. 300150-300178. The Saltville Pond 5 Outfall Report Monitoring Data dated July 14, 1981 to January 1/31/85 is attached.
- 18. Letter to Mrs. Stephany Del Re, U.S. EPA, from Mr. Vincent A. Carpano, Virginia State Water Control Board, re: Analysis of sediment and fish mercury data and muck Pond 5 data, 3/11/85. P. 300179-300180.
- 19. Letter to Mrs. Stephany Del Re', U.S. EPA, from Mr. Vincent A. Carpano, Virginia State Water Control Board, re: Replacement pages for the analysis of muck Pond 5, 3/18/85. P. 300181-300181.
- 20. Memorandum to Mr. Martin Ferguson, Virginia State Water Control Board, and Mr. J.C. Brown, Olin Corporation, from Ms. Stephany Del Re', U.S. EPA, re: Data gaps identified as a result of a review of site hydrology data, 3/20/85. P. 300182-300185. A list of Additional Data of Information Needed is attached.
- 21. Letter to Ms. Stephany Del Re', U.S. EPA, from Mr. J.C. Brown, Olin Corporation, re: Review comments on hydrology data and well data, 4/23/85. P. 300186-300187.
- 22. Letter to Ms. Stephanie [sic] Del Re', U.S. EPA, from Dr. Neil M. Ram, GCA Corporation, re: Findings concerning the effectiveness of the diversion ditch around Pond 5 on mercury flow into the North Fork of the Holston River, 5/30/85. P. 300188-300189.
- 23. Proposed Studies from June 12, 1985 Saltville, VA Meeting, 6/12/85. P. 300190-300191.
- 24. Report: Additional Studies for the Risk Assessment and Feasibility Study at the Saltville Waste Disposal Site, Smyth County, Virginia, Work Scope, prepared by NUS

- Corporation, 7/85. P. 300192-300225.
- 25. Report: Saltville Project Data Report 1984 Fish and Sediment Sampling Results, (no author cited), 7/85. P. 300226-300251.
- 26. Letter to Mr. Martin G. Ferguson, Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Mercury analysis results, 7/11/85. P. 300252-300253. The results are attached.
- 27. Letter to Mr. Martin Ferguson, Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Transmittal of results of second annual fish and sediment collections, 7/11/85. P. 300254-300254.
- 28. Letter to Mr. Jack Peterson, NUS Corporation, from Dr. Neil M. Ram, GCA Corporation, re: Information on resource recovery activities, 7/11/85. P. 300255-300256.
- 29. Letter to Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Transmittal of semi-annual report of Pond 5 outfall daily monitoring data, 10/22/85.
 P. 300257-300262. The monitoring results are attached.
- 30. Memorandum to the Saltville Task Force from Ms. Stephany Del Re', U.S. EPA, re: Description of the proposed hydrogeological investigation, 11/6/85. P. 300263-300267.
- 31. Letter to Ms. Stephany Del Re', U.S. EPA, from Mr. J. C. Brown, Olin Corporation, re: Need for additional hydrogeological work at Pond 5, 11/15/85. P. 300268-300269.
- 32. Letter to Mr. Ray Wattras, NUS Corporation, from Mr. Michael Jasinski, GCA Corporation, re: Issues relating to the Feasibility Study that may require changes to the Scope of Work, 1/22/86. P. 300270-300271.
- 33. Letter to Ms. Stephany Del Re', U.S. EPA, from Mr. Raymond P. Wattras and Mr. David MacIntyre, NUS Corporation, re: Feasibility Study schedule, 2/3/86. P. 300272-300273. A Proposed Saltville Schedule is attached.
- 34. Letter to Ms. Stephany Del Re', U.S. EPA, from Mr.

- Raymond P. Wattras and Mr. David E. MacIntyre, NUS Corporation, re: Transmittal of a Work Plan Modification for a revised Scope of Work, 2/3/86. P. 300274-300275. The Modification is attached.
- 35. Letter to Mr. J.C. Brown, Olin Corporation, from Mr. V. A. Carpano, Virginia State Water Control Board, re: Statistical analyses, 2/13/86. P. 300276-300277.
- 36. Letter to Mr. J.C. Brown, Olin Corporation, from Mr. Vincent A. Carpano, Virginia State Water Control Board, re: Plots of muck Pond 5 data, 2/27/86. P. 300278-300284. Five plots are attached.
- 37. Report: Quality Assurance Project Plan, Additional Studies for the Risk Assessment and Feasibility Study at the Saltville Waste Disposal Site, Smyth County, Virginia, prepared by GCA Corporation, 3/13/86.
 P. 300285-300336.
- 38. Letter to Mr. Rob Clemens, GCA Corporation, from Mr. Raymond P. Wattras, NUS Corporation, re: Transmittal of the Health and Safety Plan, 3/19/86. P. 300337-300377. The Health and Safety Plan is attached.
- 39. Memorandum to Mr. Jim Brown, Olin Corporation, from Ms. Stephany Del Re', U.S. EPA, re: Transmittal of Attachments that describe the work planned for March 24 and 25, 1986, 3/20/86. P. 300378-300396. Attachment A, sampling investigation of pond #5 information, and Attachment B, Change in Scope of Work for Task 12, are attached.
- 40. Letter to Mr. John Roland, Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Semi-annual report of Pond 5 monitoring data, 4/9/86. P. 300397-300402. The monitoring data is attached.
- 41. Letter to Mr. John Roland, Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Results of long term monitoring of wells, 4/17/86. P. 300403-300408. Four tables of results are attached.
- 42. Letter to Dr. Neil Ram, GCA Corporation, from Mr. Raymond P. Wattras, NUS Corporation, re: Project schedule for completion of the draft Feasibility Study, 5/12/86. P. 300409-300410.

- 43. Report: Saltville Project Data Report, 1985 Fish and Sediment Sampling Results, prepared by Olin Corporation, 5/86. P. 300411-300469. A transmittal letter is attached.
- 44. Report: <u>Feasibility Study</u>, <u>Saltville Waste Disposal</u>
 <u>Site</u>, <u>Smyth County</u>, <u>Virginia</u>, prepared by GCA
 Technology Division Inc., 9/86. P. 300470-300782.
- 45. Report: Risk Assessment, Saltville Waste Disposal Site, Smyth County, Virginia, prepared by GCA Technology Division Inc., 9/86. P. 300783-301147.
- 46. Memorandum to Ms. Stephanie [sic] Del Re', U.S. EPA, from Mr. John V. Roland, Virginia State Water Control Board, re: Mercury data for the North Fork Holston River, 9/4/86. P. 301148-301151. Figure 1, Total Mercury in Fish, 1982 vs 1986; Figure 2, Mercury in Fish 1986; and Figure 3, Hg in Fish Station by Year, are attached.
- 47. Letter to Mr. Ray Germann, U.S. EPA, from Mr. Aubrey David McKinney, Tennessee Department of Health and Environment, re: Comments on the remedial alternative selection, 6/6/87. P. 301152-301153.
- 48. Letter to Ms. Stephany Del Re', U.S. EPA, from Mr. J.C. Brown, Olin, re: Comments on the Feasibility Study, 6/10/87. P. 301154-301179. The following are attached:
 - a) a letter regarding comments on the draft Work Plan, dated September 14, 1984;
 - b) a letter regarding the need for additional hydrogeological work at Pond 5, dated November 15, 1985;
 - c) a letter regarding the revised draft final Risk Assessment Report, dated August 29, 1986;
 - d) Olin Corporation Comments on the EPA Risk Assessment;
 - e) a letter regarding the draft final Feasibility Study, dated September 19, 1986.

- 49. Record of Decision, Saltville Waste Pond Site, Saltville, Virginia, 6/30/87. P. 301180-301273.
- 50. Saltville Waste Pond No. 5 Remedial Alternatives information sheet, (undated). P. 301274-301280. The following are attached:
 - a) a May 5, 1986 meeting agenda;
 - b) a site map;
 - c) a memorandum regarding mercury transport in the North Fork of the Holston River
 - d) two handwritten pages of fish consumption data.
- 51. Letter to Dr. Neil H. Ram, GCA Corp., from Mr. Vince Carpano, Virginia State Water Control Board, re: Transmittal of analysis of flow data from muck Pond #5, (undated). P. 301281-301281.
- 52. Summary, Additional Studies for the Risk Assessment and Feasibility Study, (undated). P. 301282-301286.
- 53. Table of contents for Saltville Endangerment Assessment, (undated). P. 301287-301288.
- 54. Suggested Itinerary for Saltville, VA meeting, 6/12/85. P. 301289-301289.
- 55. Feasibility Study, Saltville Outline, (undated). P. 301290-301292.
- 56. Record of Decision, Saltville Waste Disposal Ponds Site, Saltville, Virginia, 6/30/87. P. 301293-301382.
- 57. Report: Five Year Review Report, Saltville Waste Disposal Ponds Superfund Site, Saltville, Virginia, prepared by U.S. EPA, 9/30/97. P. 301383-301388.

V. COMMUNITY INVOLVEMENT/CONGRESSIONAL CORRESPONDENCE/IMAGERY

- 1. Press Release from Virginia State Water Control Board, entitled "Mercury Clean-up in North Fork Holston River Nears Completion," 11/23/82. P. 500001-500001.
- 2. Agenda, Olin Task Force Press Release and Meeting, 12/1/82. P. 500002-500002.
- 3. National Priorities List Site summary, U.S. EPA, 7/83. P. 500003-500003.
- 4. U.S. EPA Environmental News entitled "Saltville Superfund Site Report Released," 9/2/86. P. 500004-500005.
- 5. U.S. EPA Environmental News entitled "U.S. Environmental Protection Agency Seeks Comment on Saltville Waste Disposal Site Cleanup," 5/14/87. P. 500006-500008. A draft copy is attached.
- 6. Information for Press Release, Saltville Waste Disposal Ponds Site, (undated). P. 500009-500009.

Data Summary Documents

- 1. Field Logs, 7/8/76 7/22/76.
- 2. Hydrogeologic Data and Result of Aquifer, 7/10/76-7/23/76.
- 3. Graphs of flow measures of chlorine plant, 7/24/76.
- 4. Diagrams of Saltville site, 7/14/76 9/7/76.
- 5. Mass balance study data sheets, 9/78, 12/78, 2/79, and 3/79.
- 6. Mercury Concentration Data from Test Sites 2A, 2B and 2C, 8/25/81 4/30/82.
- 7. Data on in-situ stabilization, 5/26/82.
- 8. Suggestions for evaluation of Hg reduction monitoring program, 2/10/83.
- 9. Letter to Mr. Martin Ferguson, Virginia State Water Control Board, from Mr. J. C. Brown, Olin Corporation, re: Mercury concentration and flow data, Pond 5 outfall, 2/23/83. The data is attached.
- 10. Memorandum to Mr. Walter F. Lee, U.S. EPA, from Mr. Yener A. Soylemez, U.S. EPA, re: Information to be used for a baseline, 3/1/83.
- 11. Olin muck pond #5 mercury analysis data, 3/18/83.
- 12. Mercury Flux in the North Fork Holston River Water Column, Data Sheets, prepared by Virginia State Water Control Board, 5/26/83.
- 13. Statistical evaluation of muck pond #5 outfall data, prepared by Drs. J. Oler and I.H. Suffet, Drexel University, 6/14/83.
- 14. Ambient mercury sampling results from 7/21/83 through 9/27/83, 11/10/83.
- 15. Water Monitoring Program, Sampling Data, Olin Corporation, 2/10/84 2/25/85.
- 16. Letter to Ms. Stephany Del Re', U.S. EPA, from Mr. Martin G. Ferguson, Jr., Virginia State Water Control

- Board, re: Transmittal of sample results, 5/15/84. The results are attached.
- 17. Letter to Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: Mercury concentration and flow data, pond 5 outfall, 8/29/84. The data is attached.
- 18. Letter to Mr. Martin G. Ferguson, Jr., Virginia State Water Control Board, from Mr. J.C. Brown, Olin Corporation, re: QA results of pond 5 outfall mercury analysis, 9/12/84. The results are attached.
- 19. Memorandum to Mr. Jim Brown, Olin Corporation, from Mr. Jim Moser, Olin Corporation, re: Hg analysis from sample point #4, 11/26/84.
- 20. Appendix B, Sample Preparation Analytical Procedures for Determination of Mercury in Water, Soil and Rock, (undated).